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<u>**Amendments to the Claims**</u>:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Canceled)

2. (Currently amended) A method of controlling a plurality of transcoding channels, a transcoding channel allowing an input compressed data signal encoded at an input bit rate to be converted into an output compressed data signal encoded at an output bit rate wherein a regulation process uses quantization scales and the input compressed data signal to determine a video encoding complexity, said method comprising ~~the steps of~~:

computing a weighting factor of a compressed data quality for the respective transcoding channels, the weighting factor being computed for a current picture of the input compressed data signal as an average, over a set of preceding encoded pictures, of <u>a function of</u> an average quantization scale over a preceding picture and a number of bits used to encode the same preceding picture;

determining an indicator as function of the ~~transcoding channel~~ video encoding complexity and associated weighting factor; and

allocating the output bit rate to the transcoding channel from a total output bit rate, its corresponding indicator and a sum of the indicators of the transcoding channels.

3. (Currently amended) ~~A~~ <u>The</u> method of ~~controlling a set of transcoding channels as claimed in~~ claim 2, wherein the average is a weighted average of a set of the averages calculated over the set of encoded pictures.

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4. (Currently amended) A controller for controlling a set of transcoders, a transcoder allowing an input compressed data signal encoded at an input bit rate to be converted into an output compressed data signal encoded at an output bit rate wherein a regulation process uses quantization scales and the input compressed data signal to determine a video encoding complexity, said controller comprising:

a processor configured to determine a weighting factor of a compressed data quality for the respective transcoders channel, the weighting factor being computed for a current picture from the input compressed data signal as an average, over a set of preceding encoded pictures, of a function of an average quantization scale over a preceding picture and a number of bits used to encode the same preceding picture;

determining an indicator as a function of the ~~transcoding channel~~ video encoding complexity and associated weighting factor; and

allocate the output bit rate to the transcoder from a total output bit rate, its corresponding indicator and a sum of the indicators of the transcoders.

5. (Currently amended) A data multiplexing system comprising:

a set of transcoders for converting input compressed data signals encoded at an input bit rate into output compressed data signals encoded at an output bit rate, wherein a regulation process uses quantization scales and the input compressed data signal to determine a video encoding complexity,

a controller for controlling the set of transcoders and comprising:

means for computing a weighting factor of a compressed data quality for the respective transcoders, the weighting factor being computed for a current picture of the input compressed data signal as an average, over a set of encoded pictures, of a function of an average quantization scale over a preceding picture and a number of bits used to encode the same preceding picture;

means for determining an indicator as a function of the ~~transcoding channel~~ video encoding complexity and associated weighting factor;

means for allocating the output bit rate to the transcoder from a total output bit rate, its corresponding indicator and a sum of the indicators of the transcoders, and

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a multiplexer for providing a multiplexed data signal at the total output bit rate by multiplexing of the output compressed data signals.

6. (Currently amended) A computer program product <u>stored on a computer readable medium</u> for a controller that comprises a set of instructions, which, when loaded into the controller, causes the controller to:

compute a video encoding complexity using quantization scales and an input compressed data signal;

compute a factor for a current picture of the input compressed data signal as an average, over a set of encoded pictures, of an average quantization scale over a picture and a number of bits used to encode the same picture,

determine an indicator as a function of the ~~transcoding channel~~ video <u>encoding</u> complexity and associated weighting factor; and

allocate an output bit rate to the transcoding channel from a total output bit rate, its corresponding indicator and a sum of the indicators of the transcoding channels.

7. (Currently amended) The computer program product ~~as recited in~~ <u>of</u> claim 6, wherein the average is a weighted average of a set of the averages calculated over the set of encoded pictures.